

## REMARKS

Claims 1-4, 11, 12, and 19-20 stand rejected under 35 USC §103(a) as being unpatentable over Gu. Applicant respectfully submits that the cited reference fails to establish a *prima facie* case of obviousness. As set forth in Applicant's claim 1, the claimed laminate sets forth a barrier layer comprising between about 20% to about 35% by weight of an essential oil anti-scalping additive.

It is respectfully submitted that Gu fails to teach or suggest Applicant's claimed subject matter for a number of reasons. Foremost, Gu does not address or recognize the problem of essential oil scalping by cartons used for juice products. One having ordinary skill in the art would not, upon a fair reading of Gu, come away with any suggestion that the polymers blended with fillers could be used to address the problem identified and solved by the structure set forth in Applicant's claim 1 or for the anti-scalping purposes as claimed by Applicant.

For instance, to the extent Gu does discuss fillers, such fillers are optional components and for which there is no stated function aside from use as a filler. As an optional component, Gu can hardly be viewed as teaching the desirability of inclusion of a filler within the barrier layer. There is certainly no teaching of inclusion at a loading level as specifically set forth in Applicant's claim 1.

In addition, the teaching of Gu is directed to molten polymer layers which can be applied directly to a cellulosic substrate so as to promote bonding between the molten layer and the cellulosic substrate. The inclusion of high loading levels of an additive such as calcium carbonate as that set forth in Applicant's claims is not obvious over Gu in that such high loadings could interfere with the required bonding between the polymer layer and the cellulosic substrate.

Additionally, Gu is directed to paper products which are not substrates used for packaging food and beverage products. Gu is directed to improvements in coated papers used as release liners, not as food containing structures. Similarly, since Gu is directed towards non-food contacting coated papers, one having ordinary skill in the art would not view the layer of Gu applied directly to a cellulosic substrate as having any efficacy towards the reduction of scalping of essential oils.

Food and beverage laminates are multi-layer structures in which scalping of essential oils occurs in the one or two outermost food contact layers. Accordingly, to the extent a filler quantity of an additive is applied to a polymer that directly contacts the cellulosic substrate of a non-food item, such use offers no teaching or incentive to provide the structure set forth in Applicant's claim 1. Rather, the teachings of Gu would direct placement of a calcium carbonate-containing layer to a location in direct contact with the cellulosic substrate. Such a location is not a location where scalping of essential oils occurs.

Accordingly, it is respectfully submitted that Gu fails to render obvious Applicant's claimed subject matter which provides for a barrier layer having between about 20% to about 35% by weight of an essential oil anti-scalping additive.

For similar reasons, it is respectfully submitted that Gu fails to form a *prima facie* case of obviousness with respect to the subject matter of claim 4. As amended, claim 4 is now directed to a blank resistant to the absorption of essential oils and includes specific claim language directed to such essential oil resistant barrier layers. Neither the location of the Gu polymer layer (contact with the cellulosic substrate) nor the mention of optional filler amounts would provide any incentive or motivation for one to find as obvious Applicant's claimed subject matter under a fair reading of the teachings of Gu.

With respect to the subject matter of claim 19, the process claim is directed to steps needed to limit the scalping of essential oils by a paperboard container. There is absolutely no recognition within Gu of the problems associated with essential oil scalping. Gu is not directed towards any type of food contact paper and fails to recognize the problem of essential oil scalping. Accordingly, it is respectfully submitted that Gu fails to provide any motivation or teaching that renders Applicant's claimed subject matter unpatentable. Accordingly, Applicant respectfully submits that the independent claims 1, 4, and 19 are patentable over the teachings of Gu.

Claims 1-7, 11-15, and 19-20 stand rejected under 35 USC §103(a) as being unpatentable over Castle et al. Applicant respectfully submits that Castle fails to establish a *prima facie* case of obviousness with respect to the Applicant's claimed

subject matter. The Castle et al reference fails to acknowledge, discuss, or exhibit any awareness of the Applicant's claimed subject matter directed to an essential oil barrier layer comprising between about 20% to about 35% weight of the defined additive. To the extent the Castle et al reference discusses barrier layers, such layers are directed to oxygen barrier layers as evaluated in a milk carton. To the extent the fillers in paragraph 0018 are discussed, it is noted that such fillers are optional to increase stiffness or barrier (oxygen) properties. One having ordinary skill in the art, upon a review of the teachings and suggestions of Castle et al, would not be directed to Applicant's claimed subject matter.

Castle et al fails to make any mention of essential oil barrier layers and involves no product having any essential oils. To the extent Applicant's independent claims 1, 4, and 19 specifically require stated levels of an additive such as calcium carbonate, such additives are not obvious in view of Castle et al since Castle et al views such additives as merely "optional" fillers. Further, as described in the embodiment in paragraph 0019 of Castle et al, the blend layer with the oxygen barrier properties can be applied to the exterior of a carton. The nature of Applicant's invention is such that the barrier layer must be on a surface corresponding to the interior of the carton and even then must be in proximity to or defined by the outermost skin layer which provides contact with the juice beverage product.

Accordingly, Applicant respectfully submits that a fair reading of Castle et al by one having ordinary skill in the art would not suggest or render obvious Applicant's claimed subject matter.

In specific reference to claim 19, which is a method claim of reducing scalping, it is noted that Castle et al only describes a milk carton and boards appropriately coated for use in a milk container. As such, it is not possible for Castle et al to provide any motivation or teaching to a method of reducing essential oil scalping when the Castle et al reference has no mention or discussion of such problems and involves a selection of materials and food products for which essential oil scalping does not exist.

Applicant notes that claims 21, 23, and 24 have been allowed.

By way of the above amendment, Applicant has rewritten previously objected to claim 28 to place it in an independent form and directed to a carton filled with a juice beverage. Applicant respectfully submits that the specification provides ample support for a filled juice beverage carton.

Inasmuch as all outstanding issues raised by the Examiner have been addressed, it is respectfully submitted that the present application is in condition for allowance, and action to such effect is earnestly solicited. The Examiner is encouraged to telephone the undersigned at his/her convenience should only minor issues remain after consideration of the present Amendment, to permit early resolution of same.

Please charge any additional fees required by this Amendment to Deposit Account No. 50-3172.

Respectfully submitted,

J. BENNETT MULLINAX, LLC

A handwritten signature in black ink, appearing to read 'J. Bennett Mullinax', written in a cursive style.

J. Bennett Mullinax  
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